Index of Claims

Application No.

09/863,786

Date

Examiner

Deborah A Davis

Applicant(s)

PALMGREN ET AL.

Art Unit

1641

√ Rejected
= Allowed

\_\_ (Through numeral) Cancelled

Claim

Restricted

N Non-Elected

Interference

A Appeal
O Objected

|               |  | _                                       |              |           |              |              |              |          |           |          |          |                |
|---------------|--|---|--------------|-----------|--------------|--------------|--------------|----------|-----------|----------|----------|----------------|
| Ci            | $\perp$                                      | 1                                       |              |           |              | _[           | )a           | te       |           | _        | _,       |                |
| Final         | Original                                     | 1 1 V V V V V V V V V V V V V V V V V V | 7            |           |              |              | i            |          |           | i        |          |                |
|               | 1  | įν.                                     | 7            | 7         | _            | $^{\dagger}$ | 7            | _        | +-        | +        | $\top$   | +              |
|               | 1<br>2<br>3<br>4                             | T <sub>u</sub>                          | 1            | 7         |              | Ť            | _            | _        | $\top$    | $\top$   | $\top$   | $\top$         |
|               | 3  | 1                                       | $^{\dagger}$ | 1         |              | T            | ┪            | _        | T         | $\top$   | +        | _              |
|               | 4  | 1                                       |              | 1         |              | T            |              |          | T         | †        |          |                |
| $\Box$        | 5  | V                                       | 7            | 7         |              | T            |              |          | $\dagger$ |          | T        |                |
|               | 6  | V                                       | 7            | 1         |              | T            | 1            |          | T         | 1        |          |                |
|               | 6<br>7<br>8                                  | ٧,                                      | 1            |           |              |              | ٦            |          | 1         | T        |          |                |
|               | 8  | v                                       | 1            |           |              |              |              |          |           | T        |          |                |
|               | 9  | V                                       | 4            |           |              |              |              |          |           |          |          |                |
|               | 10   | V                                       | 1            | _         |              | L            |              |          | $\perp$   |          |          |                |
|               | 11   | V                                       | 1            | $\perp$   |              | L            | $\downarrow$ |          | $\perp$   | ┸        |          |                |
|               | 12   | V                                       | 1            | 4         |              |              | 1            |          | ↓.        | $\perp$  | ┸        | 4_             |
|               | 13   | V                                       | 1            | 1         | _            |              | _            |          | 1         | $\perp$  | $\perp$  |                |
|               | 14   | ļν                                      | 4            | 4         |              | L            | 4            |          | Ļ         | 1_       |          |                |
|               | 15   | 14                                      | 7            | 4         |              | -            | 4            |          | 1         | 4-       | $\perp$  | 1              |
|               | 16   | 10                                      | 1            | +         |              | <u> </u>     | 4            |          | -         | 4        | $\perp$  | _              |
|               | 17   | IV.                                     | +            | +         |              | H            | +            |          | ╁         | +        | ╫        | +              |
|               | 11<br>12<br>13<br>14<br>15<br>16<br>17<br>18 | V                                       | -            | +         | _            | -            | +            |          | ╀         | +-       | +        | -              |
|               | 20   | $+\nu$                                  | $\star$      | +         |              | -            | +            | _        | ╁         | +        | +        | +              |
|               | 21   | 1                                       | +-           | +         |              | $\vdash$     | $^{+}$       |          | ╁         | +        | ╁╌       | +              |
|               | 22   | +                                       | t            | +         | _            |              | $^{\dagger}$ |          | -         | +        | +-       | +              |
|               | 23   | 1-                                      | t            | $\dagger$ |              | 1-           | t            |          | $\vdash$  | +        | $\top$   | <del> </del> - |
|               | 24   | 1                                       | T            | T         |              |              | T            |          |           | +        | 1        | †              |
|               | 20<br>21<br>22<br>23<br>24<br>25             |   |              |           |              | Г            | T            |          |           | Ī        | T        |                |
|               | 26<br>27<br>28                               |   |              |           |              |              | Ι            |          |           |          |          |                |
|               | _27  | $oxed{oxed}$                            |              |           |              |              |              | _        |           |          |          |                |
|               | 28   |   | _            | 4         | _            |              | ļ            |          | L         | _        |          | 4              |
|               | 29   | L                                       | L            | ╀         | 4            | _            | ļ            |          | _         | ↓_       | _        |                |
| $\rightarrow$ | 30   | ↓_                                      | ↓            | ╁         | 4            |              | ļ            |          | _         | ↓_       | <u> </u> |                |
|               | 31<br>32                                     | ┞-                                      | ╀            | +         | 4            | _            | ╁            |          |           | ₩        | ╁        | $\vdash$       |
|               | 33   | ├                                       | H            | +         | $\dashv$     |              | ╀            | _        |           | ┾        | +        | Н              |
|               | 34   | -                                       | -            | +         | +            | -            | ╀            | _        |           | ╁        | +-       | $\vdash$       |
| $\dashv$      | 35   | $\vdash$                                | ├            | +         | -+           |              | ╁            | _        | <u> </u>  | 1        | +        | $\vdash$       |
|               | 36   | $\vdash$                                |              | ╁         | +            |              | ╁            |          |           | ╁        | ╁        | +              |
|               | 37   | $\vdash$                                |              | $\dagger$ | +            | _            | t            | -        |           | t        | +        | $\vdash$       |
|               | 38   | <del> </del>                            |              | +         | 1            |              | t            | _        |           | † —      | 1        | H              |
|               | 39   | Τ-                                      |              | T         | 7            | _            | t            |          |           | t        | 1        | $\Box$         |
|               | 40   |   |              | T         | 1            |              | Γ            |          |           |          |          |                |
|               | 41   |   |              |           |              |              |              |          |           |          |          |                |
|               | 42   |   |              |           | I            |              | Ĺ            |          |           |          |          |                |
| $\rightarrow$ | 43   |   |              | Ľ         | 1            |              | Ĺ            |          |           |          | $\Box$   | Ш              |
|               | 44   | _                                       |              | <u> </u>  | 4            |              | L            | _        |           | _        | <u>_</u> | Ш              |
| $\rightarrow$ | 45   | Ш                                       | _            | ــــ      | 1            |              | L            | -        |           | <u> </u> | <u> </u> | Ш              |
|               | 46   |   |              | <u> </u>  | $\downarrow$ |              | L            | 4        |           | ļ        | ļ        | Щ              |
| $\dashv$      | 47   |   |              | $\vdash$  | 4            | -            | L            | 4        | _         | _        | <u> </u> | Щ              |
|               | 48<br>49                                     | -                                       |              | -         | +            | _            | L            | 4        |           | <u> </u> | <u> </u> | $\square$      |
|               | 50   |   | _            | -         | +            | _            |              | $\dashv$ |           |          | -        | H              |
|               | JU   |   |              | L         | 1            |              |              | $\perp$  |           |          | I        | 1 [            |

| i        | UI.           | allii    | 1        |   | _ | _ |          |          |          | 끅   | a         | Ŀ        | _        |           |              | _            |           |
|----------|---------------|----------|----------|---|---|---|----------|----------|----------|-----|-----------|----------|----------|-----------|--------------|--------------|-----------|
|          | Final         | Original |          |   |   |   |          |          |          |     |           |          |          |           |              |              |           |
|          |               | 51       | t        | 7 |   | 7 | _        | 7        |          | t   |           | t        |          | _         | +            | 7            |           |
|          |               | 52       | t        | 7 |   | 7 | _        | 7        | _        | Ť   |           | †        |          |           | 1            | 1            |           |
|          |               | 53       | T        | 1 |   | 1 | _        | 1        |          | t   |           | t        |          |           | T            | 1            | _         |
| ı        |               | 54       | T        | 1 |   | 1 | _        | 7        |          | †   | _         | T        | 7        |           | t            | 7            |           |
| Ì        |               | 54<br>55 | T        | 1 |   | 1 |          | 1        |          | t   | _         | t        | -†       |           | $\dagger$    | 7            |           |
| Ì        |               | 56       | r        | 1 |   | 1 | _        | †        | _        | †   |           | t        | ┪        |           | t            | 7            |           |
| 1        |               | 56<br>57 | T        | 1 |   | 7 |          | 1        |          | t   |           | $\vdash$ | 7        | _         | $^{\dagger}$ | ┪            |           |
| 1        | •             | 58       | †-       | † |   | 7 | _        | †        |          | t   |           | t        | 1        |           | t            | $\forall$    |           |
| -        |               | 59       | T        | 1 |   | 7 | _        | †        |          | Ť   |           | T        | 7        | _         | T            | 1            | _         |
| Ì        |               | 60       |          | 1 |   | 1 |          | †        |          | †   |           | T        | 1        |           | T            | 7            |           |
| ı        |               | 61       | T        | † |   | 1 | _        | 1        |          | Ť   |           | T        | 1        |           | $^{\dagger}$ | Ť            |           |
|          |               | 62       |          | 1 |   | 1 |          | †        |          | Ť   |           | 1        | 1        |           | T            | 7            |           |
| ı        |               | 63       |          | Ť |   | 1 |          | 1        |          | Ť   |           | 1        | 1        |           | T            | 1            |           |
| Ī        |               | 64       | T        | 1 |   | 1 |          | Ť        |          | T   |           | Г        | 1        |           | Ť            | 7            |           |
|          |               | 65       |          | Ť |   | Ť |          | 1        |          | T   |           |          | 1        |           |              | 7            |           |
| Ī        |               | 66       |          | 1 |   | 1 |          | Ť        |          | T   |           |          | 1        |           |              | 7            |           |
|          |               | 67       |          | T |   | 1 |          | T        |          | T   |           |          | T        |           | 1            | Ť            |           |
|          |               | 68       |          | T |   | T |          | T        |          | T   |           |          | T        |           |              | T            |           |
| Γ        |               | 69       |          | T |   | T |          |          |          | T   |           |          | T        |           |              | T            |           |
|          |               | 70       |          |   |   | Ι |          | Τ        |          | Γ   |           |          |          |           |              |              |           |
|          |               | 71<br>72 |          |   |   | Ī |          |          |          |     |           |          | T        |           |              |              |           |
| L        |               | 72       |          | I |   |   |          | l        |          |     |           |          |          |           |              | Τ            |           |
| L        |               | 73       |          |   |   |   |          | L        |          | L   |           |          |          |           |              |              |           |
| L        |               | 74       |          | ļ |   | ↓ |          | L        |          |     |           |          | 1        |           |              |              |           |
| L        |               | 75       |          | L |   | L |          | L        |          | L   |           |          | 1        |           |              | 1            | _         |
| L        |               | 76       |          | Ļ |   | ↓ |          | L        | _        | L   | 4         |          | ļ        |           |              | 1            |           |
| L        |               | 77       |          | Ļ |   | ļ |          | Ļ        |          | L   |           |          | ļ        |           |              | 1            |           |
| -        |               | 78       |          | ļ |   | 1 |          | L        |          |     | 4         |          | 1        |           |              | 1            |           |
| -        | _             | 79       |          | Ļ |   | L |          | Ļ        |          | L   | 4         |          | L        |           |              | 1            |           |
| L        |               | 80       |          | L | _ | L |          | L        | _        | L   | 4         |          | L        |           |              | $\downarrow$ |           |
| L        | $\rightarrow$ | 81       |          | L |   | L |          | L        |          | L., | 4         |          | L        | _         |              | L            |           |
| F        |               | 82       |          | L | _ | L |          | L        | _        |     | 4         |          | ╀        | _         |              | ╀            | _         |
|          |               | 83       |          | L |   | L | _        | Ļ        | _        |     | 4         |          | Ļ        | _         |              | L            |           |
| $\vdash$ |               | 84       |          | L |   | L |          | L        | _        | _   | 4         |          | ╀        | _         |              | Ł            | _         |
| -        | -             | 85<br>86 |          | H | _ | ┞ |          | H        | _        | _   | 4         |          | L        | -         |              | <del> </del> | _         |
| $\vdash$ |               | 87       |          | H | _ | H | _        | ┞        | 4        |     | +         |          | ┞        | -         |              | ╀            | $\dashv$  |
| H        |               | 88       |          | ┞ | - | H |          | ┝        | 4        | _   | +         |          | ╀        | -         |              | +-           | $\dashv$  |
| -        | -             | 89       |          | H | _ | ┞ |          | ┝        | $\dashv$ |     | +         |          | ⊦        | -         |              | ╀            | $\dashv$  |
| -        | +             | 90       |          | H | _ | H |          | ┝        | 4        |     | +         |          | ├        | $\dashv$  | _            | ╀            | $\dashv$  |
| $\vdash$ | -+            | 91       |          | H |   | ┝ | _        | H        | $\dashv$ | -   | +         |          | H        | $\dashv$  |              | ╀            | $\dashv$  |
| $\vdash$ | $\dashv$      | 92       | _        | _ | _ | L | $\dashv$ | -        | +        | _   | +         |          | H        | -         |              | ╁            | $\dashv$  |
| -        | $\dashv$      | 93       | -        | - | - | - | $\dashv$ | $\vdash$ | +        |     | +         |          | ┝        | +         |              | $\vdash$     | $\dashv$  |
| $\vdash$ | +             | 94       |          |   | ┪ |   | -        |          | +        | _   | +         |          | $\vdash$ | +         |              | +            | $\dashv$  |
| $\vdash$ | $\dashv$      | 95       | $\dashv$ | _ | - | - | $\dashv$ |          | +        |     | +         |          | H        | +         |              | H            | $\dashv$  |
| $\vdash$ | +             | 96       | -        |   | + | _ | +        |          | +        | _   | +         | _        | -        | +         | _            | $\vdash$     | $\dashv$  |
| $\vdash$ | <del></del>   | 97       |          |   | 1 |   | +        | _        | +        |     | +         |          | -        | +         |              | +            | $\dashv$  |
| -        |               | 98       | 7        |   | + |   | $\dashv$ | -        | +        | _   | $\dagger$ |          |          | +         |              | H            | ᅥ         |
|          |               | 99       | $\dashv$ | _ | 1 | _ | 1        | _        | +        | _   | $\dagger$ |          | _        | $\dagger$ |              | $\vdash$     | $\forall$ |
|          | ·             | 100      | _        | _ | 7 |   | 1        |          | 1        | _   | †         | $\dashv$ |          | +         | _            |              | $\dashv$  |
|          |               |          | _        |   | _ |   |          |          |          |     |           | 1        |          |           |              |              |           |

| С           | Ι                 | Date         |          |              |              |   |              |           |              |         |              |              |
|-------------|-------------------|--------------|----------|--------------|--------------|---|--------------|-----------|--------------|---------|--------------|--------------|
|             | _                 |              | T        | T            |              | Ī                                       |              |           | T            | Τ       | T            | T            |
| Final       | ig.               |              |          |              |              |   |              |           |              |         | 1            |              |
| iΞ          | l Ĕ               |              |          | 1            |              |   |              |           |              |         |              |              |
|             | 1                 | L            | $\perp$  | 4            |              | L                                       | $\perp$      |           |              |         |              |              |
|             | 101               | <u> </u>     | ╀        | 4            |              | L                                       | 4            |           | L            | 1_      | $\perp$      |              |
| <u> </u>    | 102<br>103        | _            | 1        | 4            |              | L                                       | 4            |           | L            | $\perp$ | 4_           |              |
|             | 103               | <u> </u>     | $\bot$   | - -          |              | L                                       | 4            | _         | ╄            | 4       | +            | $\bot$       |
| -           | 104               | $\vdash$     | +        |              |              | L                                       | 4            | _         | ╀            | +       | +            | -            |
| -           | 105<br>106        | ⊢            | +        | +            |              |   | +            |           | $\vdash$     | +-      | +            |              |
|             | 107               | ┢            | +        | +            |              | ┡                                       | +            |           | ⊢            | +       | +            | +            |
|             | 108               | -            | +        | +            |              | -                                       | $^{+}$       |           |              | ╁       | +            | +            |
|             | 109               |              | $^{+}$   | +            |              | $\vdash$                                | $\dagger$    |           | ╁            | ╁       | +-           | +            |
|             | 110               | 1            | t        | †            | _            |   | +            | _         | H            | †-      | +-           | +            |
|             | 111               |              | T        | T            |              |   | $^{\dagger}$ |           | T            | 1       | T            | <del> </del> |
|             | 112               |              |          | 1            |              |   | 1            | _         |              | 1-      | 1            |              |
|             | 113               |              |          |              |              |   | T            |           | Г            | T       | 1            |              |
|             | 114<br>115        |              |          |              |              |   | I            |           |              |         | I            |              |
|             | 115               |              |          |              |              |   |              |           |              |         | $\perp$      |              |
|             | 116<br>117        | _            | ļ_       | $\perp$      | _            |   | $\perp$      |           |              |         |              |              |
|             | 117               | _            | ▙        | $\downarrow$ | _            | _                                       | $\downarrow$ |           | _            |         | ļ            |              |
|             | 118               |              | ļ_       | 1            |              | _                                       | $\perp$      |           |              |         |              | Ш            |
|             | 119               |              | -        | $\perp$      | 4            |   | $\perp$      |           | _            | ╙       | $\perp$      | Ш            |
|             | 120               |              | ┝        | +            | -            | _                                       | +            | _         | _            | ┝       | <del> </del> | $\vdash$     |
|             | 121<br>122<br>123 |              | ├        | ╀            | -            |   | +            | _         |              | ⊢       | ┼            | +            |
|             | 122               |              | -        | +            | $\dashv$     |   | +            |           |              | ┝       | +            | +-+          |
| _           | 124               |              | H        | +            | $\dashv$     | -                                       | ╁            | ٦         |              | ┢       | +-           | $\vdash$     |
|             | 125               |              | $\vdash$ | $^{+}$       | +            | _                                       | +            | ┪         |              |         | +            | 11           |
|             | 124<br>125<br>126 |              |          | $\top$       | 7            |   | $^{+}$       | ┪         |              |         |              | $\vdash$     |
|             | 127<br>128        |              |          |              |              |   | T            |           |              |         | t            | M            |
|             | 128               |              |          |              | ٦            |   |              |           |              |         |              |              |
|             | 129               |              |          | Τ            | I            |   |              |           |              |         |              |              |
|             | 130<br>131        |              | _        |              | 1            |   |              |           |              |         |              |              |
|             | 131               |              |          | L            | $\downarrow$ |   | L            |           |              |         |              |              |
|             | 132               |              |          | L            | 4            |   | L            | 4         |              |         |              | Ш            |
|             | 133               | _            | _        | 1            | 4            |   | Ļ            | 4         |              |         | <u> </u>     | Ш            |
|             | 134               | 4            |          | +            | +            |   | ╀            | 4         |              |         | _            | Щ            |
|             | 135<br>136        | $\dashv$     |          | ╀            | +            |   | +            | $\dashv$  |              |         | <u> </u>     | $\vdash$     |
| -           | 137               | -            | _        | +-           | +            |   | +            | +         |              |         | <u> </u>     | $\vdash$     |
|             | 138               |              | _        | $\vdash$     | +            |   | +            | +         |              |         | $\vdash$     | Н            |
| -+          | 139               | $\dashv$     | _        | $\vdash$     | +            |   | H            | +         | -            |         |              | -            |
|             | 140               | $\dashv$     | _        | $\vdash$     | +            |   | $\vdash$     | $\dagger$ |              |         | $\vdash$     | $\dashv$     |
| $\neg \neg$ | 141               | 1            |          | $\vdash$     | +            |   | $\vdash$     | †         | _            |         | -            | $\dashv$     |
|             | 142               |              |          |              | †            |   | Г            | +         | T            | _       |              | $\neg$       |
|             | 143               |              |          |              | J            |   |              | 1         |              |         |              |              |
| $\Box$      | 144               |              |          |              | I            |   |              |           |              |         |              |              |
|             | 145               | $\Box$       |          |              | I            |   |              | I         |              |         |              |              |
|             | 146               | 4            |          | _            | 1            |   |              | 1         | $\Box$       | _]      | ]            |              |
|             | 147               | $\perp$      |          | _            | 1            | _                                       |              | 1         |              |         | _            |              |
|             | 148               | $\downarrow$ | _        | _            | $\downarrow$ | _                                       |              | 1         | $\downarrow$ | _       |              | _            |
|             | 149               | $\dashv$     |          | <u> </u>     | +            | _                                       | _            | +         | -            | -       | _            | _            |
|             | 150               |              |          | L            | 1            | اــــــــــــــــــــــــــــــــــــــ |              | 1.        | $\perp$      |         |              | J            |